

REMARKS

The Examiner is thanked for the thorough examination and search of the subject patent application.

Claims 15, 17, 27, 30 35 and 36 are pending; Claims 15 and 27 have been currently amended; Claims 35 and 36 have been newly added; Claims 1-14, 16, 18-26, 28-29, and 31-32 have been canceled. No new matter is believed to be added.

Response to Claim Rejections under 35 U.S.C. 112

Reconsiderations of the rejection of Claims 27 and 30 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement are requested based on the following paragraphs.

Withdrawal of rejection under 35 U.S.C. 112, first paragraph, to Claims 27 and 30 is respectfully requested as Claims 27 and 30 have been currently amended.

Reconsiderations of the rejection of Claims 27 and 30 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention are requested based on the following paragraphs.

Withdrawal of rejection under 35 U.S.C. 112, second paragraph, to Claims 27 and 30 is respectfully requested as Claims 27 and 30 have been currently amended.

Response to Claim Rejections under 35 U.S.C. 103

Applicants respectfully traverse the rejections for at least the reasons set forth below.

Response to Claims 15, 17 and 35

As currently amended, independent Claim 15 is recited below:

15. A method for fabricating a circuit component, comprising:

providing a semiconductor wafer, a metal pad over said semiconductor wafer, a passivation layer over said semiconductor wafer, wherein an opening in said passivation layer is over said metal pad and exposes said metal pad, and a gold layer over said semiconductor wafer, wherein said gold layer is connected to said metal pad through said opening; and

ion milling said gold layer.

Section I:

Reconsiderations of the rejection of Claims 15 and 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukamoto et al. (U.S. Pat. No. 5,554,859) in view of Dass et al. (U.S. Pat. No. 6,162,652) are requested based on the following paragraphs.

Applicants respectfully assert that the method currently claimed in Claim 15 patentably distinguishes over the citation by Tsukamoto et al. (U.S. Pat. No. 5,554,859) in view of Dass et

al. (U.S. Pat. No. 6,162,652) because both Tsukamoto et al. and Dass et al. fail to teach, hint or suggest the claimed subject matter that “a gold layer connected to a metal pad exposed by an opening in a passivation layer is ion milled”, as shown in Fig. 9 and as currently claimed in Claim 15

For at least the foregoing reasons, withdrawal of rejection under 35 U.S.C. 103(a) to currently amended Claim 15 is respectfully requested.

Applicants respectfully submit independent Claim 15 patentably distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent Claims 17 and 35 patentably defines over the prior art as well.

Section II:

Reconsiderations of the rejection of Claims 15 and 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Dass et al. (U.S. Pat. No. 6,162,652) in view of Chen et al. (US 2003/0006271) and Lin et al. (U.S. Pub. No. 2002/0127836) are requested based on the following paragraphs.

Applicants respectfully assert that the method claimed in Claim 15 patentably distinguishes over the citation by Dass et al. (U.S. Pat. No. 6,162,652) in view of Chen et al. (U.S. Pub. No. 2003/0006271) and Lin et al. (U.S. Pub. No. 2002/0127836).

The Examiner considers that “Lin [Para. 63] discloses wherein said cleaning said gold bump or pad comprises ion milling”. ~ *See lines 10 and 11 on page 5, in the last Office Action mailed Oct. 5, 2007* ~

Applicants respectfully traverse the Examiner’s opinion because Lin et al. fail to teach, hint or suggest a gold bump or pad can be ion milled. Lin et al. teach that an aluminum pad 32 can be in-situ sputter cleaned, but fail to teach, hint or suggest that a gold layer can be ion milled, as currently claimed in Claim 15. ~ *See Para. [0050]-[0052]* ~

It is believed that the claimed subject matter that a gold layer is ion milled is unobvious over Dass et al. in view of Chen et al. and Lin et al. because all of Dass et al., Chen et al. and Lin et al. fail to teach, hint or suggest that a gold layer can be ion milled.

For at least the foregoing reasons, withdrawal of rejection under 35 U.S.C. 103(a) to Claim 15 is respectfully requested.

Applicants respectfully submit independent Claim 15 patently distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent Claims 17 and 35 patently defines over the prior art as well.

Response to Claims 27, 30 and 36

As currently amended, independent Claim 27 is recited below:

27. A method for fabricating a circuit component, comprising:

providing a semiconductor wafer, a metal pad over said semiconductor wafer, a passivation layer over said semiconductor wafer, wherein an opening in said passivation layer is over said metal pad and exposes said metal pad, and a noble-metal layer over said semiconductor wafer, wherein said noble-metal layer is connected to said metal pad through said opening; and

ion milling said noble-metal layer.

Reconsiderations of the rejection of Claims 27 and 30 rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (U.S. Pub. No. 2003/0006271) in view of Dass et al. (U.S. Pat. No. 6,162,652) and Lin et al. (U.S. Pub. No. 2002/0127836) are requested based on the following paragraph.

Applicants respectfully assert that the method claimed in Claim 27 patentably distinguishes over the citation by Chen et al. (U.S. Pub. No. 2003/0006271) in view of Dass et al. (U.S. Pat. No. 6,162,652) and Lin et al. (U.S. Pub. No. 2002/0127836).

The Examiner considers that “Lin [Para. 63] discloses wherein said cleaning said gold bump or pad comprises ion milling”. ~ *See lines 7 and 8 on page 6, in the last Office Action mailed Oct. 5, 2007 ~*

Applicants respectfully traverse the Examiner’s opinion because Lin et al. fail to teach, hint or suggest a noble-metal bump or pad can be ion milled. Lin et al. teach that an aluminum pad 32 can be in-situ sputter cleaned, but fail to teach, hint or suggest that a noble-metal layer can be ion milled, as currently claimed in Claim 27. ~ *See Para. [0050]-[0052] ~*

It is believed that the claimed subject matter that a noble-metal layer is ion milled is unobvious over Chen et al. in view of Dass et al. and Lin et al. because all of Chen et al., Dass et al. and Lin et al. fail to teach, hint or suggest that a noble-metal layer can be ion milled.

For at least the foregoing reasons, withdrawal of rejection under 35 U.S.C. 103(a) to Claim 27 is respectfully requested.

Applicants respectfully submit independent Claim 27 patently distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent Claims 30 and 36 patently defines over the prior art as well.

CONCLUSION

Some or all of the pending claims are now believed to be in condition for allowance. Accordingly, allowance of the claims and of the application as a whole is respectfully requested.

It is requested that should the Examiner not find that the Claims are now Allowable that the Examiner call the undersigned at 845-452-5863 to overcome any problems preventing allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "S B Ackerman".

Stephen B. Ackerman, Reg. No. 37,761